

**PART 1 - GENERAL****RELATED DOCUMENTS**

1.1

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

**SUMMARY**

1.2

- A. This Section includes the following:

Panel signs.

A.

Cast-metal plaques.

A.

Signage accessories.

A.

- B. Related Sections include the following:

Division 10431 Section "Signs" for panel sign-type directories

B.

**SUBMITTALS**

1.3

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of sign based on provided design intent drawings.

Shop Drawings: Include plans, elevations, and large-scale sections of typical members and

B.

other components. Show mounting methods, grounds, mounting heights, layout, spacing, reinforcement, accessories, and recommended installation details for others.

Provide message list for each sign, including details of wording, lettering, symbols and Braille

A.

layout.

Samples for Initial Selection: For each type of sign material indicated that involves color selection or finish selection.

Samples for Verification: For each type of sign, include the following Samples to verify color

A.

selected:

Panel Signs: Full-size Samples of each type of sign required.

1.

- 2. Casting: Show representative texture, character style, spacing, finish, and method of attachment.

3. Approved samples will be returned for installation into Project if approved.

Qualification Data: N/A for installation by others.

B.

C. Maintenance Data: For signage cleaning and maintenance requirements to be included in maintenance manuals for AOC.

#### QUALITY ASSURANCE

1.2

Source Limitations: Obtain each sub-contracted sign type through one source—from a single manufacturer.

A.

Regulatory Requirements: Comply with the Americans with Disabilities Act (ADA) and with code provisions as adopted by authorities having jurisdiction.

B.

Interior Code Signage: Provide signage as required by accessibility regulations and 1. requirements of authorities having jurisdiction. These include, but are not limited to, the following:

a. Signs for Identification of “Permanent” Spaces: ADAAG.

Product Options: Information on Drawings and in specifications establishes requirements for

C.

aesthetic effects and performance characteristics. Aesthetics effects are indicated by dimensions, arrangements, alignment and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction. Performance characteristics are indicated by criteria subject to verification by one or more methods including field testing and in-service performance

Product Options: Drawings indicate size, profiles, and dimensional requirements of signs and

D.

are based on the specific system indicated. Refer to Division 1 Section General Requirements. 1. Do not modify intended aesthetic effects, as judged solely by the Architect, except with the Architect’s approval. If modifications are proposed, submit comprehensive explanatory data to the Architect for review.

#### PROJECT CONDITIONS (Not Applicable)

1.3

#### COORDINATION

1.4

For signs supported by or anchored to permanent construction, advise installers of anchorage

A.

devices about specific requirements for placement of anchorage devices and similar items to be used for attaching signs.

For signs supported by or anchored to permanent construction, furnish templates for

1.

installation of anchorage devices.

#### WARRANTY

1.7

Special Warranty: Manufacturer’s standard form in which manufacturer agrees to repair or replace

A

components of signs that fail in material or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:
  - a. Structural failures of frames.
  - b. Faulty operation of hardware
  - c. Deterioration of metals, metal finishes and other materials beyond normal weathering
2. Warranty Period: Five (5) years from date of acceptance of delivery.

## **PART 2- PRODUCTS**

### **PANEL SIGNS**

#### **1.1**

General: Provide panel signs that comply with requirements indicated for materials, thicknesses, finishes, colors, designs, shapes, sizes, and details of construction.

Produce smooth panel sign surfaces constructed to remain flat under installed conditions

#### **1.**

within tolerance of plus or minus measured diagonally.

Refer to the Design Intent Drawings and notes provided by The Douglas Group for the AOC.

#### **A.**

Manufactured or custom-fabricated signs may be used if in compliance with design and technical requirements identified on the drawings and in this section.

Cast-Acrylic Sheet: Manufacturer's standard and as follows:

#### **B.**

Color: As selected by Architect from manufacturer's full range.

#### **1.**

Aluminum Sheet and Plate: ASTM B 209 (ASTM B 209M), alloy and temper recommended by

#### **C.**

aluminum producer and finisher for type of use and finish indicated, and with not less than the strength and durability properties of 5005-H15.

Phenolic-Backed Photopolymer Sheet: Provide light-sensitive, water-wash photopolymer face

#### **D.**

layer bonded to a phenolic base layer to produce a composite sheet with a Type D Shore durometer hardness of 80.

PVC: Extruded, high-impact PVC plastic with painted finish.

#### **E.**

Unframed Panel Signs: Fabricate signs with edges mechanically and smoothly finished to

#### **F.**

comply with the following requirements:

Edge Condition: Square Cut.

#### **1.**

2. Corner Condition: Square.

Frames: Fabricate frames to profile indicated; comply with the following requirements for

#### **G.**

materials and corner conditions:

Material: Aluminum and Bronze either Cast or Extruded.

#### **1.**

2. Corner Condition: Square.

- H. Brackets: Fabricate brackets and fittings for bracket-mounted signs from extruded aluminum to suit panel sign construction and mounting conditions indicated. Factory-paint brackets in color matching Architect's sample.
- I. Graphic Content and Style: Provide sign copy that complies with requirements indicated in the Sign Schedule and design intent Drawings for size, style, spacing, content, mounting height and location, material, finishes, and colors of signage.
- J. Tactile and Braille Copy: Manufacturer's standard process for producing copy complying with ADA Accessibility Guidelines and ICC/ANSI A117.1. Text shall be accompanied by Grade 2 Braille. Produce precisely formed characters with square cut edges free from burrs and cut marks.
- 1. Panel Material: Photopolymer.
- 2. Raised-Copy Thickness: Not less than .
- K. Colored Coatings for Acrylic Sheet: For copy, background and frame colors, provide Pantone Matching System (PMS) colored coatings, including inks and paints, that are recommended by acrylic manufacturers for optimum adherence to acrylic surface and are non-fading for application intended.

#### CAST-METAL PLAQUES

#### 2.2

- General: Provide castings free from pits, scale, sand holes, and other defects. Comply with requirements specified for metal, border style, background texture, and finish and in required thickness, size, shape, and copy.
- A. Manufacturers must have current seal graphics of all 50 states, District of Columbia and territories on file for use in this project, or must provide, as part of their bid proposal, submittal and services, any and all costs associated with the production of vector artwork to match approved bitmapped images of state seals as provided by the AOC.
- B. Aluminum Castings: Provide aluminum castings of alloy and temper recommended by sign manufacturer for casting process used and for use and finish indicated.
- C. Bronze Castings: ASTM B 584, alloy UNS No. C83600 (No. 1 manganese bronze).
- D. Border Style: Raised flat band.
- E. Background Texture: Manufacturer's standard leatherette finish.
- F. Mounting: Concealed studs for substrates encountered (for installation by others).
- G.

#### 1.3 PANEL SIGN TYPES

- A. Room Signs – Identification of Senator Offices:

- i. Material: Photopolymer, Plastic Sheet, Aluminum, Brass and Bronze.
- i. Perimeter: Framed.
- i. Copy: Surface Tactile and Braille, inherently Cast Bronze.
- i. Character Style: Adobe Garamond Family.
- i. Text: As indicated in the Sign Schedule.
- i. Message: Changeable and Fixed.

Sizes:

- a. Sign: Sizes as indicated on Design Intent Drawings.
- b. Character: Sizes as indicated on Design Intent Drawings. It is required that the selected fabricator identify any limitations in a given fabrication process that might require alteration to the design intent prior to fabrication.

Colors:

Frame: Bronze and Aluminum.

Character: As indicated on Design Intent Drawings.

Background: AOC Brown per the provided Design Intent Drawings.

ACCESSORIES.

1.1

Vinyl film: Where applicable, provide 3M, or equivalent, opaque non-reflective vinyl film,

- A. 0.0035 inch (0.089- mm) minimum thickness, with pressure-sensitive adhesive backing suitable for both exterior and interior application.

INSTALLATION ACCESSORIES. *(Provided as additional information applicable to preparation of*

1.2

*signs for installation by others).*

Mounting Methods: Use concealed fasteners, double-sided vinyl tape and silicone adhesive

- A. fabricated from materials that are not corrosive to sign material and mounting surface.
- Anchors and Inserts: Provide nonferrous-metal or stainless steel anchors and inserts for exterior
- B. installations and elsewhere as required for corrosion resistance. Use toothed steel or lead expansion-bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete or masonry work.

FINISHES, GENERAL

2.6

Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for

- A. recommendations for applying and designating finishes.
- Protect mechanical finishes on exposed surfaces from damage by applying strippable, temporary
- B. protective covering before shipping.
- Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are
- C. acceptable if they are within one-half of range of approved Samples. Noticeable variations in same piece are not acceptable. Variations in appearance of other components are acceptable if they are within range of approved Samples and are assembled or installed to minimize contrast.

## 2.7 ALUMINUM FINISHES

Clear Anodic Finish: Manufacturer's standard clear anodic coating, 0.018 mm or thicker, over a

- A. satin (directionally textured) mechanical finish.  
Clear Finish: Natural satin finish with clear polyurethane protective coat.
- B. Baked-Enamel Finish: Manufacturer's standard baked enamel complying with paint
- C. manufacturer's written instructions for cleaning, conversion coating, and painting.  
Cast-Metal Plaque Finishes:
- D.
  - Raised Areas: Hand-tool and buff borders and
    - i. raised copy to produce manufacturer's standard satin finish.
  - i. Background Finish: Painted per provided Design Intent Drawings.

## COPPER-ALLOY FINISHES

## 2.8

Bronze and Brass Plate: Medium satin (directionally textured) finish per design intent drawings.

- A. Cast-Bronze Character Finishes: Manufacturer's standard satin finish with exposed surfaces free
- B. from porosity, burrs, and rough spots; with returns finished with fine-grain air blast.  
Cast-Bronze Plaque Finishes: Exposed surfaces free from porosity, burrs, and rough spots; with
- C. returns finished with fine-grain air blast.  
  - Raised Areas: Hand-tool and buff borders and raised copy to produce
  - 1. manufacturer's standard satin finish.
  - 2. Background Finish: Painted per provided design intent drawings.
- Cast-Brass Plaque Finishes: Exposed surfaces free from porosity, burrs, and rough spots; with
- D. returns finished with fine-grain air blast.  
  - 1. Raised Areas: Hand-tool and buff borders and raised copy to produce manufacturer's standard satin finish.
  - 2. Background Finish: Finished per provided design intent drawings.
- Clear Protective Coating: Coat exposed surfaces of copper alloys with manufacturer's
- E. standard clear organic coating specially designed for coating copper-alloy products.

**PART 3- EXECUTION**

EXAMINATION (Not applicable)

2.1

- 3.2 INSTALLATION (*Fabricator is to provide all hardware, brackets, fasteners, fittings, anchors necessary for installation by the AOC. This section is provided as additional information applicable to the fabrication/preparation of signs for installation by others*).

General: Locate signs and accessories where indicated, using mounting methods of types

A.

described and in compliance with fabricator/manufacturer's written instructions.

Wall-Mounted Panel Signs: Attach panel signs to wall surfaces using methods indicated below:

B.

Vinyl-Tape Mounting: Use double-sided foam tape to mount signs to

1.

smooth, nonporous surfaces. Do not use this method for vinyl-covered or rough surfaces.

Silicone-Adhesive Mounting: Use liquid-silicone adhesive recommended

2.

in writing by sign manufacturer to attach signs to irregular, porous, or vinyl-covered surfaces. Use double-sided vinyl tape where recommended in writing by sign manufacturer to hold sign in place until adhesive has fully cured.

3. Mechanical Fasteners: Use nonremovable mechanical fasteners placed through predrilled holes. Attach signs with fasteners and anchors suitable for secure attachment to substrate as recommended in writing by sign manufacturer.

Bracket-Mounted Units: Provide manufacturer's standard brackets, fittings, and hardware as

C.

appropriate for mounting signs that project at right angles from walls and ceilings. Attach brackets and fittings securely to walls and ceilings with concealed fasteners and anchoring devices to comply with manufacturer's written instructions.

Cast-Metal Plaques: Mount plaques using standard fastening methods recommended in writing

D.

by manufacturer for type of wall surface indicated.

1. Concealed Mounting: Mount plaques by inserting threaded studs into tapped lugs on back of plaque. Attachment method must accommodate that the plaques be removable at least once a year by AOC maintenance staff.

**END OF SECTION 10431**